Briefing to US Coast Guard
Regarding
Southeast Alaska Emergency Towing System Project

The purpose of this briefing is to inform about the Southeast Alaska Emergency Towing System project and request your participation in one or more exercises in 2011.

The Alaska Department of Environmental Conservation (ADEC) is sponsoring a project to establish an Emergency Towing System (ETS) in Southeast Alaska. An ETS is a pre-staged package of towing equipment that may be deployed in the event a disabled vessel requires assistance. This system was developed in Unalaska in 2007 and has since been deployed in annual exercises in Unalaska Bay. The ETS was successfully deployed in the *M/V Golden Seas* incident in November 2010. To date, the State has placed three ETS packages into service, two in Unalaska and one in Kodiak. An additional ETS has been purchased for Southeast Alaska with delivery expected in March 2011.

The purpose of the Southeast Alaska ETS project is to familiarize the maritime community with the ETS and demonstrate it through an exercise during the spring/summer of 2011. An ad hoc workgroup has been formed and a project website has been established. The following organizations have participated in the workgroup:

- Alaska Department of Environmental Conservation
- U.S. Coast Guard, 17th District Response Advisory Team
- Nuka Research and Planning Group (project contractor)
- Alaska Steamship Response
- Southeast Alaska Petroleum Resource Organization
- Alaska Marine Highway System
- Southeast Alaska Pilots Association
- Canadian Coast Guard
- Princess Cruises
- Sitka Harbormaster
- Survey Point Group
- AMAK Towing
- Cruise Line Agencies of Alaska

The SE Alaska ETS Deployment Exercise

The goal of the exercise is to deploy the ETS in SE Alaska to test the equipment, train the responders and validate the procedures in the manual. The project contractor will coordinate the exercise. Objectives for this exercise are:

- Safety of participants and observers
- Familiarize responders with the operations of the equipment
- Mobilize ETS for deployment by helicopter and tug
- Practice actual deployments
    - Helicopter - Ship – Tug
    - Tug – Cruise Ship
- Obtain and validate procedures for the Procedures Manual

The workgroup will assist in the planning and execution of the exercise. They will identify and make available vessels and crew, participate in the drill and provide input regarding

the outcomes. Specifically, we are asking the USCG to consider participating in the exercise by allowing the use of two or more of your ships as a “distressed vessel” and as a “tow vessel of opportunity” to demonstrate the deployment of the ETS. The time, place, and limitations of the deployment are open to discussion.

Conclusion

Within the last decade, several distressed or stricken vessel incidents occurred in or near Alaska. In a few cases these have caused environmental and economic repercussions. In most situations, the vessel carried fuel in bottom tanks, thus posing a significant pollution risk from a grounding. The Emergency Tow System was developed to attempt to mitigate this threat. The program is already providing benefits as evidenced by the successful deployment to the disable vessel *M/V Golden Seas* in the Bering Sea. The expansion of this program will provide an additional response asset and training to the maritime community in the SE Alaska subarea. The USCG’s participation in the exercise would be beneficial to the entire maritime community in Southeast Alaska.

Further information on this project:

Project Webpage http://www.nukaresearch.com/projects/seakets/index.htm

Aleutian Islands ETS Webpage http://www.dec.state.ak.us/spar/perp/aiets/home.htm

Aleutian Islands ETS Manual
http://www.dec.state.ak.us/spar/perp/aiets/090211_ETS_manual&APP_A_SCREEN.pdf

Draft Exercise Plan
http://www.nukaresearch.com/projects/seakets/documents/110104DraftETSExercisePlan.doc

M/V Golden Seas Incident Page
http://dec.alaska.gov/spar/perp/response/sum_fy11/101203201/101203201_index.htm

Photo: Aleutian ETS displayed during 2007 exercise.

Draft Exercise Plan

Southeast Alaska Emergency Towing System

Spring 2011

1. Exercise Sponsors.

This exercise is sponsored by:

State of Alaska, Department of Environmental Conservation;

U. S. Coast Guard

2. Purpose.
3. Exercise Objectives.
4. Exercise Organization.
    - Safety: TBD
    - Port Operations: TBD
    - Aerial Operations: TBD
    - Tug Operations: TBD
    - Shipboard Operations: TBD
    - ETS Configuration/Packing, and Line Gun Operations: TBD
    - Communications: TBD
    - Documentation: TBD

5. Exercise Participants.

The following organizations will participate in the exercise:

- USCG -
- Alaska Department of Environmental Conservation
- Nuka Research and Planning Group
- Additional Participants TBD

6. Scenario Overview.
7. Concept of Operations.

Stage I. System components and packing

Stage II. Harbor/airport operations

Stage III. Helicopter mobilization to ship

Stage IV. Line-gun operations

Stage V. Notification, activation, command and control

Stage VI. Tug to ship deployment

Stage VII. Ship to tug deployment

A detailed script for the ETS deployment from the ship and tug is contained in Annex F.

8. Concept of Control.
9. Exercise Artificialities.
10. Exercise Assumptions.
11. Administration and Logistics.

Nuka Research and Planning Group will be coordinating the exercise overall. Each

Administrative Contacts

- USCG - LT Mark Wagner
- ADEC - John Brown
- Nuka Research and Planning Group – Mark Janes, mark@nukaresearch.com, 299-3224
- Other contacts will be added as they are identified

12. Safety.
13. Communications
14. Reports.

15. Schedule of Events.

Time	Event	Location	Stage Coordinator
Day 1			
	Arrive on location and check in with TBD	TBD	TBD
1000 hr	Participant briefing	TBD	Exercise Director
1330 hr	Stage I: System components and packing	TBD	TBD
1500 hr	Stage II. Harbor/airports operations	TBD	TBD
1600 hr	Stage III. Helicopter mobilization to ship	TBD	TBD
1700 hr	Stage IV. Line-gun operations	TBD	TBD
1930 hr	Stage V: Notification, activation, command and control	TBD	TBD
Tuesday July 31, 2007			
0730 hr	Ops Briefing	TBD	Safety Officer
To be determined based on vessel	Transportation to vessels and exercise location	Participants to disperse to their assigned vessels and the vessels will move to their assigned locations	
	Lunch – Brown Bag	Aboard vessels, bag lunches to be picked-up at breakfast	
To be determined	Stage VI. Tug to ship deployment	TBD	
To be determined	Stage VII. Ship to tug deployment	TBD	
1930 hr	Participants Dinner - ??	TBD	
Wednesday August 1, 2007			
0900 hr	De-brief	TBD	TBD
	Return critique, check-out of exercise, return to duty	TBD	Mark Janes

16. Annexes

Annex A: Safety Plan

Annex B: Communications Plan

Annex C: Stage Specifics

Annex D: Logistics

- Participant assignments
- Vessel information

Annex E: Critique Form

Annex F: Script for the ETS exercise

Annex G: Map

- ANNEX A -

SAFETY PLAN FOR EMERGENCY TOW EXERCISE

A-1) Overview –

Safety is the first overall objective for this exercise. Safety is always the highest priority and is everyone's responsibility. If anyone observes an un-safe act or condition, immediately take whatever actions are necessary to correct the problem (including stopping the exercise play) and notify the stage coordinator and or the safety offices. A 1,000 yard safety zone will be established around the ship's location on the 2nd day of the exercise.

A-2) Personal Protective Equipment: –

Each participant is responsible for providing their own PPE including:

- USCG approved Personal Flotation Device (for anyone on deck of a vessel)
- Hearing protection
- Eye protection
- Hard hat (for anyone on the bow of the tramper or working within 50 feet of lifts by cranes or forklifts)
- Clothing for weather conditions

A-3) Safety Briefings: –

It is the responsibility of the Stage Coordinator to conduct an operational and safety briefing prior to each stage.

A vessel safety briefing will be conducted onboard each vessel immediately after boarding for all non-crew participants. Safety Officers from the Coast Guard will be on board each vessel platform and provide safety oversight for the exercise.

A-3) Communications as related to safety: –

Communications shall be prefaced with "THIS IS A DRILL" or "EXERCISE – EXERCISE – EXERCISE." In the event of an actual emergency, declare a cease to all exercise play by announcing, "THIS IS NOT A DRILL, WE HAVE AN ACTUAL EMERGENCY." The message should be relayed to all exercise participants. Emergency communications will occur on Marine VHF Channel 16.

Safety broadcasts shall be conducted by the Harbor Master on Channel-16 beginning 1-hour in advance of the ETS deployment exercise and continue every hour until completion of the full exercise. The following announcement will be used:

> *Securite, Securite, Securite....Hello all stations this the Port of **TBD** with a safety broadcast notice to mariners, Break.....the U.S. Coast Guard and State of Alaska will be conducting a safety exercise in **TBD** that will take place from 0900 - 1900 on date **TBD**. Mariners are advised to stay clear of the area, all vessels entering the 1000 yard safety zone will announce their presence and intentions on Channel 22a...Break...this is the Port of **TBD**...OUT.*

Any vessel entering the 1,000 yard safety zone will announce their presence and intentions on Channel 22a.

The FAA will be notified by the USCG air crew, prior to helicopter operations and asked to notify other airmen.

A-4) Stage Safety –

Specific safety issues associated with each stage are:

Stage I – System Components and Packing

- Ports personnel will follow established safety procedures.
- Everyone should be alert for slips, trips, and fall hazards.
- Anyone within 50 feet of lifting operations, must have a hard hat and steel toe shoes.
- Beware of backing equipment and aircraft movements

Stage II – Port/Airports Operations

- Ports personnel will follow established safety procedures.
- Everyone should be alert for slips, trips, and fall hazards.
- Anyone within 50 feet of lifting operations, must have a hard hat and steel toe shoes
- Beware of backing equipment and aircraft movements

Stage III – Helicopter Mobilization to Ship

Observers at the airport must be aware of helicopter noise and rotar wash. There will be a lot of noise and wind associated with the helicopter. Things will blow around from the rotor wash, which can reach 100mph. Damage can occur to personnel, buildings, the helicopter, etc. from objects being blown around.

- PPE: Hearing and eye protection are required. Ski-type goggles are recommended for eye protection, as they won't blow away.
- Observers should stay at least 100 yards from the helicopter during lifting operations.
- In anticipation of helo ops, it is imperative that ground personnel ensure the area is clear to mitigate possible damage.
- When approaching the helicopter, never enter under the rotor arc unless the pilot or crewmember has given a "thumbs up" or waved in signal.
- When entering the rotor arc, stay low, move quickly and go directly to the helicopter. There are various areas around the helo (depends on the helo though) that are more dangerous. For example, the tail rotor area is to be avoided. Additionally, with our H65, we teach folks to avoid entering the rotor arc near the nose as the rotor disc can move to as low as 5 feet under certain conditions.
- During load hook up, ground parties should attempt hook up expeditiously to avoid prolonged hover time. Once hook up is complete, ground parties should depart the area in the opposite direction of entry and stay clear of the helicopter and load until it is lifted and clear.
- Ship crew should not be under the helicopter when it is hovering over the bow. PFD, hearing protection, safety glasses, and hard hats with chin straps are required for anyone on deck.

ETS Load Preparation

The primary goal of load preparation is to provide a load that will ride safely in flight, and arrive at the destination undamaged. External loads are subject to extremely high winds during transportation, and shall be prepared accordingly.

Cargo Net Loading

The provided cargo net will be utilized to transport the ETS. The load shall be prepared as follows:

- Avoid lightweight (less than 100 lbs.) loads because of their instability during flight.
- Do not load small items on the bottom of the net where they could be forced out of the openings in the net.
- Cover or secure together lightweight or small items to keep them from blowing out of the net.
- Once lightweight or small items are packed together, place them on top of the larger loads.
- One method of safeguarding small items against loss in flight is to secure the corners of the net together by taking opposite corner rings and weaving them through at least two (2) web straps in the webbing below the opposite rings.
- Fasten the sling leg through all four (4) corner rings.
- When the helicopter lifts the net, the weight of the load will cinch the net tight, and prevent losing items through the net.
- Secure the net corner rings with a becket.

- WARNING - Lightweight loads can be blown up into the bottom of the helicopter, or fly up into the rotor blades.

- CAUTION - Never attach the safety hook to any point other than the designated attachment point. Never connect a load in any way other than directly to the safety hook. Kinking and chafing will damage the lifting equipment.

Delivery of ETS

Delivery of the ETS may be conducted with vessels provided a 15-foot obstruction clearance can be maintained at all times. These operations should not normally be conducted above Sea State 4. Before any ETS delivery operations, a thorough brief shall be conducted to include at a minimum the following items:

- ⇑ Drop off area shall be suitable to both the disabled vessel's Captain and the Aircraft Commander.
- ⇑ The disabled vessel shall conduct a Foreign Object Debris (FOD) walk down as best able before commencing operations and includes examining the drop off area and removing or securing lightweight and small items.
- ⇑ Procedures to follow in the event of an emergency.
- ⇑ Relative wind direction for drop off.
- ⇑ Ensure the ETS is properly secured and free of FOD.
- ⇑ The approach of the helicopter shall be announced as best able to the disabled vessels topside crew.
- ⇑ Only personnel needed to conduct ETS deliver operations should be allowed on deck.
- ⇑ Before moving in to pick up the ETS, the helicopter shall be clear of the disabled vessel.

⇑ The disabled vessel's crew shall be aware of the danger associated with static discharge and briefed not to touch the load until the helicopter has released the cargo hook and the ETS is safely on deck.

⇑ Radio communications with the helicopter while it is in a hover over the ETS delivery zone are distracting, and should be limited to urgent communications only.

⇑ The helicopter will normally complete the approach into the wind, arriving in a hover just off the disabled vessel.

⇑ When the approach of the helicopter is announced, all personnel will clear the ETS delivery area.

⇑ Pilot, when ready, transmits on the radio to the disabled vessel: "Request permission to hover for ETS delivery."

⇑ Disabled vessel Captain answers: "Roger, you are cleared to hover for ETS delivery."

⇑ Pilot, using commands from the helicopter crewman, maneuvers the helicopter over the ETS delivery area.

⇑ Helicopter crewman gives directions for spotting and lowering the load. As soon as the load is on deck, the crewman informs the pilot.

⇑ When the pendant slackens, the crewman in charge on disabled vessel signals the pilot to release the load. The pilot or crewman (as briefed) releases the cargo hook.

- WARNING - Once the helicopter has been cleared to hover, personnel shall not enter the ETS delivery area until after the load is on deck. No attempt shall be made by personnel to steady the load during delivery.

- WARNING - The crewman in charge on disabled vessel shall be stationed well clear of the ETS delivery area. The pilot shall attempt to maintain visual contact with the crewman in charge on disabled vessel at all times.

If the pilot loses sight of the crewman in charge on disabled vessel, he or she shall advise the aircrew who will relay the crewman in charge on disabled vessel signals.

- WARNING - The pilot shall maneuver the helicopter so to be able to see and avoid all obstructions.

- WARNING - Releasing the load before there is slack in the pendant can cause damage to the aircraft, cutter, load, and/or injury to personnel.

- NOTE - The sling may not immediately release from the aircraft cargo hook. If the sling hangs up, the pilot shall initiate a slow vertical climb, gradually applying tension until it separates from the hook.

- CAUTION - Nets, beckets, and cargo wrap-around straps shall never be cut.

- CAUTION - If the cargo handling procedures are not followed, damage to the helicopter, loss of equipment, and injury to personnel could result.

- WARNING - Under no circumstance shall flash pictures be taken during night ETS delivery since the flash will temporarily blind the pilots.

Stage IV – Line-gun Operations

- PPE: Safety Glasses and hearing protection shall be worn by the shooter and all personnel in the immediate vicinity.
- Treat the line launcher system with the same safety considerations as a firearm.
- Make sure there is an operator safety zone for the deployment of the launcher.
- Aboard Tug: Perform all loading and firing operations at the rail with the gun pointed outboard in a safe direction, i.e., clear of rigging, ship's structure, antennae or any obstacles on which the line may become fouled.
- Ashore: Perform all loading and firing operations in a safe area clear of trees, overhead wires or antennae and away from buildings or other obstructions.
- When transporting or carrying a gun from its place of stowage, be sure that the safety is engaged.
- Position the gun after firing to prevent line entanglement after firing and during the projectile's flight. Keep the gun elevated until the projectile reaches its target.
- Ensure that the shot line is secured to the projectile prior to firing.
- When firing the gun, make certain that the line of aim is well over the heads of and away from personnel on the receiving vessel.
- Watch for personnel in and beyond the target area.
- Give adequate warning and receive confirmation prior to firing the launcher.
    - The tug captain will communicate the following commands to the ship's crew via VHF radio and whistle signals:
        - One Whistle - Make Ready for Line-gun Shot
          We intend to shoot a line-gun projectile to the bow of your ship, once you are prepared to receive it. Have your deck crew wear hard hats and stationed at the bow of the ship to receive the line. Acknowledge with one whistle.

        - Two Whistles - Standby for Line-gun Shot
          We are prepared to shoot and assume that you are prepared to receive. Please acknowledge that your crew is prepared. Have to crew on your bow take cover until the projectile is fired. Acknowledge with two whistles.

        - Three Whistles - Line-gun Shot to Follow Immediately
          The line-gun will fire immediately after this signal.

Stage V – Notification, Activation, Command & Control

- Everyone should be alert for slips, trips, and fall hazards.

Stage VI – Tug to Ship Deployment

- Non-crew members will receive an onboard safety briefing covering emergency life saving equipment and where to go in the event of a shipboard emergency.
- Anyone on deck must wear PPE including: PFD, hard hat, and eye protection.
- There will be an Alaska Marine Pilot stationed on the bridge of the ship to serve as a safety observer for any VIPs. All visitors to remain on the bridge unless otherwise advised.
- During transit and all other times be respectful of bridge personnel.
- Camera crew will be only ones allowed to roam freely. Camera person shall have designated safety person assigned by pilot at all times.
- Safety officer shall be pilot or other person assigned by pilot.

- There will be a minimum number of persons located on the bow of the ship during line hook-up operations
    - SE Alaska Marine Pilot
    - One camera operator and safety observer

    - Vessel crew needed for line retrieval operations
- There will be a minimum number of persons located on aft deck of the tug during line hook-up operations
    - One camera operator and safety observer
    - Vessel crew needed for line deployment operations
- No one is allowed on the bow of the ship or on the aft deck of the tug during towing.

Stage VII –Ship to tug Deployment

- Non-crew members will receive an onboard safety briefing covering emergency life saving equipment and where to go in the event of a shipboard emergency.
- Anyone on deck must wear PPE including: PFD, hard hat, and eye protection.
- There will be an Marine Pilot stationed on the bridge of the ship to serve as a safety observer for any VIPs. All visitors to remain on the bridge unless otherwise advised.
- During transit and all other times be respectful of bridge personnel.
- Photographers will be only ones allowed to roam freely. Photographers shall have designated safety person assigned the safety officer at all times.
- Safety officer shall be the pilot or other person assigned by pilot.
- Do not make-fast the messenger line or tow line until instructed to do so by the Stage Coordinator
- There will be a minimum number of persons located on the bow of the ship
    - SE Alaska Marine Pilot
    - Photographer and safety observer
    - Vessel crew needed for line deployment operations
- There will be a minimum number of persons located on aft deck of the tug
    - Photographers
    - Vessel crew needed for line retrieval operations
- No one is allowed on the bow of the ship or on the aft deck of the tug during towing.

A-5) <u>Photographer Safety</u>

- All camera operators must have a safety observer during filming operations
- Camera operators must adhere to all vessel safety protocol and be present for safety briefing
- Photography must be considered secondary to safety
- At no time should a camera operator interfere with vessel operations or communications
- The vessel captain has absolute authority on board

A-6) <u>Observer/Safety Boat Safety</u>

- Non-crew members will receive an onboard safety briefing covering emergency life saving equipment and where to go in the event of a shipboard emergency.
- Anyone on deck must wear a PFD.
- Observer/Safety boat captains shall communicate with Captain Steve Moreno, AMPA prior to leaving the dock to determine your station during the exercise.
- Observer/Safety boat captains shall announce their presence and intentions on Channel 22a when entering the 1,000 yard safety-zone around the tramper.
- Observer boat captains shall stay at least 500' away from the tug and ship during towing operations.

- ANNEX B -
COMMUNICATION PLAN

1. Incident Name ETS Deployment Exercise	2. Operational Period (Date/Time) **From: TBD** **To: TBD**	**INCIDENT RADIO COMMUNICATIONS PLAN** ICS 205-OS

3. BASIC RADIO CHANNEL UTILIZATION

SYSTEM/CACHE	CHANNEL	FUNCTION	ASSIGNMENT	REMARKS
Marine VHF	**22a**	**Primary Communications**	**All exercise participants**	**General Exercise Communications**
Marine VHF	**16**	**Emergency Communications**	**All exercise participants**	
Marine VHF	**81**	**Secondary Communications.**	**All exercise participants**	**Logistics and Support**
Marine VHF	**66a**	**Tug standby**		
Handhelds				
Cell Phones		**Exercise Director**		**Exercise Director**
Cell Phone		**Nuka Research**		**Exercise Coordinator**
Cell Phone		**Nuka Research**		**Exercise Administration**
Cell Phone		**Ship Ops**		
Cell Phone		**Tug**		
Cell Phone		**ADEC**		
Cell Phone		**USCG**		
Cell Phone				
Cell Phone				
Cell Phone				

INCIDENT RADIO COMMUNICATIONS PLAN **ICS 205-OS**

- ANNEX C -

STAGE SPECIFICS

Stage	Time Date Location	Stage Coordinator	Objectives
Stage I. System components and packing	Day 1 Time **TBD**	**TBD**	• Break-out and inspect the SE Alaska ETS • Re-pack the ETS for Stage V mobilization • Establish ETS components and nomenclature • Establish procedures for packing the ETS • Establish maintenance and inspection procedures • Capture stills and video for training and procedures manual
Stage II. Harbor/airports operations	Day 1 Time **TBD**	**TBD**	• Walk through mobilization of the ETS from its storage location to the airport for helicopter mobilization and to the harbor dock for vessel mobilization • Establish procedures for security and storage of the ETS • Establish procedures for mobilization of the ETS to the airport • Establish procedures for mobilization of the ETS to the harbor • Discuss safety issues associated with harbor operations • Establish training process for harbor personnel

Stage	Time Date Location	Stage Coordinator	Objectives
			• Capture stills and video for training and procedures manual
Stage III.Helicopter mobilization to ship	Day 1 Time **TBD**	**TBD**	• Discuss safety issues associated with helicopter mobilization • Mobilize ETS to the ship by helicopter • Capture stills and video for training and procedures manual
Stage IV. Line-gun operations	Day 1 Time **TBD**	**TBD**	• Demonstrate line-gun operations, including re-charging the air cylinder • Establish procedures for line-gun operations • Establish procedures for line-gun storage, inspection, recharging, and maintenance • Discuss safety issues associated with line-gun operations • Ready the line-gun for Stage VII • Capture stills and video for training and procedures manual
Stage V. Notification, activation, command and control	Day 1 Time **TBD**	**TBD**	• Establish each agency/organization role, authorities and responsibilities • Walk through notification and activation process

Stage	Time Date Location	Stage Coordinator	Objectives
			• Walk through the command and control process, both overall and at the scene • Establish procedures for notification and activation • Establish procedures for command and control • Discuss safety issues • Capture stills and video for training and procedures manual
Stage VI. Tug to ship deployment	Day 2 Time TBD	TBD	• Discuss safety issues associated with ship to tug deployment • Establish procedures for ship to tug deployment • Deploy ETS from ship to tug • Establish a short tow • Release ETS to tug • Recover ETS and ready for Stage VII • Capture stills and video for training and procedures manual
Stage VII. Ship to tug deployment	Day 2 Time TBD	TBD	• Discuss safety issues associated with tug to ship deployment • Establish procedures for tug to ship deployment

Stage	Time Date Location	Stage Coordinator	Objectives
			• Deploy ETS from tug to ship • Establish a short tow • Release ETS to tug • Recover ETS and ready for storage • Capture stills and video for training and procedures manual

- ANNEX D -

LOGISTICS

Participant Information

Agency	Title	First	Last	Location	Transport	Participant Role

Vessel Information

Vessel	Organization	Designation	Participant Capacity	Contact	Boarding Location
		Distressed Vessel			TBD
		Rescue Tug			TBD
		Rescue Tug			TBD

		Observer			
		Observer			

Notes: *Participant capacity is in additional to crew.

- ANNEX E -

CRITIQUE FORM

SE Alaska Emergency Towing System

DEPLOYMENT EXERCISE CRITIQUE SHEET

Stage I – System Components and Packing
1. Were Stage I objectives met as outlined in the exercise plan? ❒ YES ❒ NO
2. Were participants able to view and familiarize themselves with all ETS components? Was consistent nomenclature used throughout Stage I? ❒ YES ❒ NO
3. Did the Stage Coordinator establish specific procedures for configuring the ETS for rescue vessel transport? for helicopter transport? If no, what components were missing? ❒ YES ❒ NO
4. Did the Stage Coordinator establish specific maintenance and inspection procedures? ❒ YES ❒ NO
5. Were safety considerations discussed prior to any Stage I activities? ❒ YES ❒ NO
6. Were Stage I objectives captured with photography? ❒ YES ❒ NO
7. What do you see as the most important Stage I procedures? Were these procedures covered during the deployment exercise?

Stage II – Harbor and Airport Operations

1. Were Stage II objectives met as outlined in the exercise plan?

❒ YES ❒ NO

2. Did the Stage II Coordinator walk through the ETS mobilization procedures for rescue vessel transport to harbor dock? For helicopter transport to specified airport location?

❒ YES ❒ NO

3. Did the Stage Coordinator establish specific procedures for ETS storage and security?

❒ YES ❒ NO

4. Did the Stage Coordinator establish specific mobilization procedures for ETS transport to the airport for helicopter deployment?

❒ YES ❒ NO

5. Did the Stage Coordinator establish specific mobilization procedures for ETS transport to the harbor dock for rescue vessel deployment?

❒ YES ❒ NO

6. Were safety considerations discussed prior to any Stage II activities?

❒ YES ❒ NO

7. Were ETS training guidelines established for Ports personnel?

❒ YES ❒ NO

8. Were Stage II objectives captured photography?

❒ YES ❒ NO

9. What do you see as the most important Stage II procedures? Were these procedures covered during the deployment exercise?

❒ YES ❒ NO

Stage III – Helicopter Mobilization to Ship

1. Were Stage III objectives met as outlined in the exercise plan?

❒ YES ❒ NO

2. Were safety considerations discussed prior to any Stage III activities?

❒ YES ❒ NO

3. Was the ETS mobilized from the airport helicopter pad to the vessel without incident?

❒ YES ❒ NO

4. Were Stage III objectives captured with photography?

❒ YES ❒ NO

5. What do you see as the most important Stage III procedures? Were these procedures covered during the deployment exercise?

Stage IV – Line Gun Operations

1. Were Stage IV objectives met as outlined in the exercise plan?

❒ YES ❒ NO

2. Did the Stage IV Coordinator demonstrate line-gun operations (including re-charging the projectiles)?

❒ YES ❒ NO

3. Did the Stage Coordinator establish specific procedures for line gun operations?

❒ YES ❒ NO

4. Did the Stage Coordinator establish specific procedures for line gun storage, inspection and maintenance?

❒ YES ❒ NO

5. Were safety considerations for line gun operations discussed prior to any Stage IV activities?

❒ YES ❒ NO

6. Were Stage IV objectives captured with photography?

❒ YES ❒ NO

7. What do you see as the most important Stage IV procedures? Were these procedures covered during the deployment exercise?

❒ YES ❒ NO

Stage V – Notification, Activation, Command and Control

1. Were Stage V objectives met as outlined in the exercise plan?

❒ YES ❒ NO

2. Were each agency's or organization's roles, authorities and responsibilities established and concise?

❒ YES ❒ NO

3. Did the Stage Coordinator explain and walk through the ETS notification and activation process?

❒ YES ❒ NO

4. Did the Stage Coordinator explain the command and control process and walk through this process for the overall exercise? for on scene command and control?

❒ YES ❒ NO

5. Were step-by-step ETS notification and activation procedures established?

❒ YES ❒ NO

6. Were step-by-step ETS command and control procedures established?

❒ YES ❒ NO

7. Were safety considerations discussed prior to any Stage V activities?

❒ YES ❒ NO

8. Were Stage V objectives captured with photography?

❒ YES ❒ NO

9. What do you see as the most important Stage V procedures? Were these procedures covered during the deployment exercise?

❒ YES ❒ NO

Stage VI – Tug (Rescue Vessel) to Ship Deployment

1. Were Stage VI objectives met as outlined in the exercise plan?

❒ YES ❒ NO

2. Did the Stage Coordinator establish specific procedures for ETS deployment from a ship to a rescue vessel? If no, what components were missing?

❒ YES ❒ NO

3. Did the ETS rescue vessel to ship deployment follow the established procedures laid out by the Stage Coordinator? If no, which steps were not followed?

❒ YES ❒ NO

4. Were there any steps observed during the rescue vessel to ship deployment that were not included in the established procedures? If so, which steps were missing?

❒ YES ❒ NO

5. Were safety considerations discussed prior to any Stage VI activities?

❒ YES ❒ NO

6. Were Stage VI objectives captured with photography?

❒ YES ❒ NO

7. What do you see as the most important Stage VI procedures? Were these procedures covered during the deployment exercise?

Stage VII – Ship to Tug (Rescue Vessel) Deployment

1. Were Stage VII objectives met as outlined in the exercise plan?

❒ YES ❒ NO

2. Did the Stage Coordinator establish specific procedures for ETS deployment from ship to rescue vessel? If no, what components were missing?

❒ YES ❒ NO

3. Did the ETS the ship to rescue vessel deployment follow the established procedures laid out by the Stage Coordinator? If no, which steps were not followed?

❒ YES ❒ NO

4. Were there any steps observed during the ship to rescue vessel deployment that were not included in the established procedures? If so, which steps were missing?

❒ YES ❒ NO

5. Were safety considerations discussed prior to any Stage VII activities?

❒ YES ❒ NO

6. Were Stage VII objectives captured with photography?

❒ YES ❒ NO

7. What do you see as the most important Stage VII procedures? Were these procedures covered during the deployment exercise?

SE Alaska Emergency Towing Systems

DEPLOYMENT EXERCISE

OBERSERVATIONS/RECOMMENDATIONS

FURTHER RECOMMENDATIONS / SUGGESTIONS

VERIFICATION

Signature	Title	Date

Please Return to* Mark Janes *Prior to ETS Exercise Check - out

- ANNEX E -

Script for the ETS exercise for deployment from rescue vessel to the distressed vessel and distressed vessel to rescue vessel

DEPLOYMENT FROM THE RESCUE VESSEL TO THE DISTRESSED VESSEL

Note: The following details are intended to outline essential parts of the exercise after the ETS has been placed on the tug. The tote should be secured by whatever method the tug decides is appropriate to prevailing conditions and method of deployment.

1. **Note: Throughout out the deployment never tie off any messenger line at any time. Due sea and swell if it is tied off it may not be able to be slacked in time to avoid breaking.**

On the tug

Step 1. Rigging of the ETS for deployment.

This should be done before the tug departs the harbor if time allows. The ETS will always be packed so that it is ready for deployment from the tug.

1. Upon opening of the ETS container the towing thimble will be on top of the package and is of sufficient length to be led out to the stern of the tug into the pins and hooked to the main tow wire. *Note: there will be two buoys in the ETS (one for the end of the 7/8" messenger (pick up buoy) and one for the thimble/ soft eye. The pick up buoy should be set aside as it will not be needed for this type of deployment.*

2. Lead out sufficient length of the 7/8" messenger to the top deck of the tug or close to where the line gun will be fired and secure. This end will be secured to the initial messenger sent by line throwing gun. *Note: the 7/8" messenger and the soft eye torpedo buoy will already be attached to the soft eye that leads to the ship.*

3. Depart harbor for distressed vessel.

Step 2. Deployment of the ETS to the ship

2. The tug should position itself **upwind** of the distressed vessel and prepare the line throwing gun for firing. *Note: for the purposes of the exercise use the projectiles with the protective/luminescent cover*

3. When in position the tug should communicate with vessel and confirm they are ready for the first messenger. The projectile should be fired so the projectile will land across the forward most hatch on the ship. Do not attempt to fire messenger forward of this point. *Note: Accuracy is not as essential as getting the line across. The ship crew can retrieve from this position until the 7/8" messenger is aboard*

4. After the messenger from the line throwing gun is aboard the ship, the end of the line throwing messenger should be clipped or tied into the 7/8" messenger. Upon confirmation that the ship is ready the messenger should be led out directly from the box. *Note: Tug should ensure it remains in a position so messengers are not brought up taught.* The messenger should lead out on its own without need for attendance.

5. After the 7/8" messenger is led out the main tow line will be retrieved by the ship. The tow line should lead out on its own directly from the box. *Note: This is another reason why the tote should be secured well to the deck.* Tug should remain in a position so messenger and tow line are not brought up taught. *Note: The soft eye torpedo buoy will be a good indicator as to when the soft eye of the tow line is clearing the water and going through the bull nose.*

6. After the signal is given by the ship that the tow line is secure enough wire should be led out at discretion of tug master to take vessel under tow. For the purposes of the exercise a short tow is sufficient.

On the ship

1. All personnel should prepare for the projectile messenger line delivered via the line throwing gun by being behind a fixed object in the bow area. When ready the ship and tug will communicate their readiness and the line throwing gun and projectile messenger will be fired.

2. After the projectile messenger is received via the projectile the ship personnel should retrieve the messenger by hand upon a confirmation by the tug that it is ready to lead out the 7/8" messenger. It is not necessary to bring the line forward until the 7/8" messenger is aboard. *Note: try to save projectile and small projectile messenger.*

3. After the ship end of the 7/8”messenger is aboard it should be unclipped or untied from the projectile messenger and be walked forward and led through the bull nose of the ship and brought to a capstan.

4. Once to the capstan the rest of the 7/8” messenger and tow line should be retrieved until the ship end of the tow line (gray) is aboard. In light sea conditions this may be done by hand but the tow line is very heavy and at the minimum if power is available the tow line eye should be brought out of the water and aboard by capstan. The soft eye torpedo buoy should fit directly through the bull nose of the ship and should be unclipped before it gets to the capstan.

5. Enough of the tow line should be brought aboard so it can be stopped off and placed on the bitts for towing. After it is stopped off the eye will be placed on the tow bitts.

6. The vessel is now ready to be towed.

7. *Note: For the purpose of the exercise a wire pendant or spectra pendant will substituted to pass through the bull nose and shackled to the tow line to avoid damage to the system.*

8. After the short tow the system should be retrieved to a point where the tow line can be disconnected from the tow wire and released. **Make sure to clip on a spare torpedo buoy to the thimble before letting go of the tow line. This is not part of the normal deployment equipment but for the purpose of the exercise it is needed.**

Intermediate step in preparation for deployment from distressed vessel to rescue vessel

1. Once the Tow line is released from the tug and the thimble buoyed off the ship should retrieve the tow line and fake it down thwart ships on deck so the thimble is faked down on the forward end and the ship end of the towing line is aft and placed on the bitts.

DEPLOYMENT FROM THE DISTRESSED VESSEL TO THE RESCUE VESSEL

Note: The helicopter exercise will take place on the 30th. When lifted the package is likely to become slightly tangled thus it will need to be repacked for the deployment on the 31st to ensure it is packed correctly. the next day. Because the helo cannot lift the package back off I suggest that the ships cargo gear be used to place the ETS on the dock or tug (if the vessel is at anchor) and returned to the repacking area.

On the ship

The following details are intended to outline essential parts of the deployment after the ETS has been delivered to the ship via helicopter and is prepared for deployment. (For the purpose of the exercise it is assumed the ETS has been delivered already)

1. The ETS should be faked down on the fore deck in the following manner from forward moving aft.

- One end of the 7/8" messenger should be led through the led out through the bull nose and led back over the rail with the lighted pick up buoy attached. *Note: a substitute buoy will be used for actual deployment since the actual pick up buoy is water activated and very expensive. For picture purposes we will have the real one aboard but for the exercise we will use a dummy.*

- The other end of the 7/8" messenger should be shackled to the tow line thimble.

- The thimble torpedo buoy should be clipped into the thimble.

- The line should be faked down on the fore deck thwart ships with the thimble end forward and the ship end of the tow line aft and placed on the bitts.

2. Enough line should be brought though the bull nose so that when the pick up buoy is tossed over the side it will reach the water with plenty of slack.

3. With one person tending the line and another with the pick up buoy, the pick up buoy should be tossed well away from the vessel. As the pick up buoy drifts all the line, including the tow line, should be led out. *Note: if the ship still has propulsion it should be used to back away from the pick up buoy.*

4. At this point the rest is up to the tug. The vessel will be taken under tow.

On the tug

1. The tow wire should be prepared for shackling into the thimble of the ETS tow line.

2. The pick up buoy should be retrieved by a grapple and the line brought in by either capstan or by hand until the thimble is on deck of the tug.

3. Remove the thimble torpedo buoy and shackle the ETS tow line to the tugs tow wire.

4. The tug is now ready to lead out tow wire at the master discretion and commence a short tow if time allows.

Final step

Once the final tow is complete I suggest the ship take package back to shore thus the tug will release the ETS tow line thimble with thimble torpedo buoy attached and the ETS will be retrieved and placed in a cargo net and slung ashore or to a tug for decontamination.

- ANNEX G -

LOCATION MAP

TBD